

**West Nile Virus Newsletter**

This is an electronic publication designed to keep you informed on issues of interest related to West Nile virus (WNV) in Washington, and provide current information to assist you in developing a response plan to WNV in your jurisdiction.

Surveillance News

Information submitted to ArboNet, the national electronic surveillance system for West Nile virus established by the Centers for Disease Control and Prevention, shows the following case and death information for western states as of August 28, 2003.

	Cases	Deaths
Colorado	635	6
Montana	19	0
New Mexico	41	2
South Dakota	204	2
Wyoming	31	0

Nationwide there have been a total of 1,442 cases with 21 deaths.

Washington surveillance activity has included testing of 661 birds from 35 counties, speciation of over 900 mosquito pools from 27 counties and testing of 46 horses from 20 counties. Also, 191 mosquito pools and 395 blood samples from sentinel chicken flocks have been tested by the Benton County Mosquito Control District. There have been no positive surveillance findings to date.

California has reported its' first West Nile positive surveillance findings. The findings include a positive *Culex tarsalis* mosquito pool and two positive sentinel flocks. Both findings were in Imperial County in the southeastern corner of the state.

Local Health Focus – Spokane Regional Health District

Submitted by Dorothy MacEachern, MS, MPH, Spokane Regional Health District

The Spokane Regional Health District (SRHD) WNV program operates jointly out of the Epidemiology and Environmental Health programs. Both programs have given many presentations to groups including pest control operators, high school students, senior citizens, nursing home regulators, and the local Board of Health. Two staff members participated in an online chat, hosted by the local newspaper to directly answer questions from the public.

Printed educational materials are available to the general public in English, Spanish, and Russian. A flyer on mosquito habitat reduction was distributed with all utility bills in the month of May, and was sent home with school children in the majority of school districts in the county. Early summer local TV stations were given the opportunity to film a mosquito trap and taught how it worked, so that they could have that “in the can” if it was needed later in the summer.

SRHD has produced a video CD that is available free of charge to community groups and medical professionals. Health care providers and veterinarians are also updated about the status of WNV in the community, the state, and the nation through the monthly communicable disease newsletter, and by provider alerts as needed.

Dead bird surveillance is conducted in collaboration with agencies whose work regularly takes them outdoors, such as road crews, storm water maintenance crews, park and recreation staff, and animal control agencies. Staffers at these agencies have been trained to identify and collect proper specimens for testing. SRHD’s WNV information line provides general information on WNV, gives the option for the public to report dead bird sightings, and addresses how to safely dispose of dead birds that are not testable.

SRHD has also had great cooperation from city and county agencies in identifying exact locations of retention ponds, catch basins, and other sources of standing water, to plot the best trapping locations for mosquito surveillance.

Communicable Disease Epidemiology Update

This summer, the Office of Communicable Disease Epidemiology (CD Epi) has received many calls about cases of aseptic meningitis (AM) from local health jurisdictions and concerned clinicians. Most cases of AM are caused by enteroviruses and occur among children and young adults. Enteroviruses (includes ECHO- and Coxsackieviruses) cause mild illnesses with fever, AM, and sometimes rashes; they circulate all year but cause the most disease in summer and fall. Symptoms of enteroviral illness are similar to those of WNV infection.

When should you test for WNV? Testing at the Department of Health, Public Health Laboratory (DOH PHL) is suggested for WNV and St. Louis encephalitis (SLE) virus IgM in serum and/or CSF under the following circumstances:

- 1) A patient is ≥ 18 years of age, has AM, and is ill enough to be hospitalized, or

- 2) Patients of all ages with unexplained encephalitis, acute flaccid paralysis, or atypical Guillain-Barre syndrome.

Other suspected arboviral infections may be tested at DOH PHL on a case-by-case basis, after consultation with CD Epi.

For outpatients with fever, headache, neck stiffness, and/or rash suspected of having WNV infection, it is suggested that clinicians send specimens to commercial labs. The DOH PHL will re-test specimens on patients with compatible clinical histories and positive IgM results for WNV at commercial laboratories.

For more information visit our website: http://www.doh.wa.gov/Notify/nc/wnv_res.htm

Mosquito Focus – *Culiseta inornata*

Culiseta inornata is most often found in poorly drained irrigated areas but has been collected in almost all semi-permanent and permanent waters. It is also common in shaded forest pools at elevations up to 6000 feet. Larvae are often found with *Anopheles freeborni* and *Culex tarsalis*. Adults are large and light brown in color, which makes them easily distinguishable from other mosquitoes. Also, the males lack the bushy antennae of other species.

Culiseta inornata prefers to feed on large domestic animals but occasionally bites humans, most aggressively at dusk. They are active flyers and can travel up to 10 miles from their breeding location. Females hibernate and larvae may overwinter as they are very resistant to low temperatures.

This species has been found naturally infected with Western Equine Encephalitis and is a potential WNV vector.

New Web Pages on Larvicides

Two new web pages have been posted with information on the mosquito larvicides *Bacillus thuringiensis israelensis* (Bti) and *Bacillus sphaericus* (Bs). The information was developed for use by health officials in answering questions about the health and environmental effects of these products. Additional informational material is under development for the other commonly used mosquito control compounds. The Bti and Bs information can be viewed at <http://www.doh.wa.gov/ehp/ts/Zoo/WNV/Pesticides/Bti.html> and <http://www.doh.wa.gov/ehp/ts/Zoo/WNV/Pesticides/Bsphaericus.html>.

Article Submission

We are interested in receiving articles for future publications of the WNV newsletter. Please submit articles to Jack Lilja, jack.lilja@doh.wa.gov.

Community Comments

Let us hear your comments on this newsletter, your needs, or things you would like to see, by sending them to Maryanne Guichard, (360) 236-3391 or maryanne.guichard@doh.wa.gov.

WNV Web Resources

Washington State Department of Health www.doh.wa.gov/wnv
Center for Disease Control <http://www.cdc.gov/ncidod/dvbid/westnile/>
Washington State University Cooperative Extension <http://wnv.wsu.edu/>
Cornell University, Center for Environment <http://www.cfe.cornell.edu/erap/WNV>
Washington State Department of Agriculture
<http://agr.wa.gov/FoodAnimal/AnimalHealth/Diseases/WestNileVirus/default.htm>

DOH Contact List for West Nile Virus

General Public Toll-Free Hotline 1-866-78VIRUS

Publications: Brochures/Response Plan/Fact Sheets

Laura Harper, (360) 236-3380, or laura.harper@doh.wa.gov.

Surveillance: Mosquito

Jo Marie Brauner, (360) 236-3064, or jomarie.brauner@doh.wa.gov.

Surveillance: Dead bird surveillance and general WNV response

Tom Gibbs, (360) 236-3060, or tom.gibbs@doh.wa.gov.

Surveillance: Horses, case reporting, laboratory assistance

Dr. John Grendon, (360) 236-3362, or john.grendon@doh.wa.gov.

NPDES: Training, technical assistance

Ben Hamilton, (360) 236-3364, or benjamin.hamilton@doh.wa.gov.

WNV in Humans: Clinical information, case reporting, and laboratory testing

Call your local health jurisdiction or DOH Communicable Disease Epidemiology,
(206) 361-2914 or (877) 539-4344.

Assistance with news releases and media response

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